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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,806	10/19/2004	**Arnoldus Werner Johannes Oomen**	NL 020692	4812

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
PAUL, DISLER	

ART UNIT	PAPER NUMBER
2614	

MAIL DATE	DELIVERY MODE
10/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/511,806	OOMEN ET AL.	
	Examiner	Art Unit	
	DISLER PAUL	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17; 19-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17; 19-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

In regard to the amendment of independent claims {1, 14, 17}, which cite, the limitation as "wherein *the second portion is differentially coded with respect to the first portion"* has been further considered and allowed.

1. However, the examiner maintain the rejection in regard to independent claims {19-21} , since Davis et al. (US 6,021,386) explicitly disclosed such claims feature as recited.

Allowable Subject Matter

Claims 1-17 are allowed.

In regard to independent claims 1, while, the prior art of record disclose of a method of encoding a multi-channel audio signal comprising at least two audio channels, the method comprising the steps of: generating a single channel audio signal from the at least two audio channels and encoding, using an encoder, the single channel audio signal into a bit stream as an encoded single channel audio signal; generating information from the at least two audio channels allowing to recover with a required quality level the multi-channel audio signal from the single channel audio signal and the in format ion and combining the information and the single channel audio signal; wherein the generating information step comprises the steps of: determining a first portion of the information for a first frequency region of the multi-channel audio signal using a parameter determining

circuit and encoding, using a parameter coder; the first portion of the information into bit stream as an encoded first portion of the information ;determining a second portion of the information for a second frequency region of the multi-channel audio signal, using the parameter determining circuit, the second frequency region being a portion of the first frequency region and encoding, using the parameter coder , the second portion of the information into the bit stream as an encoded second portion of the information.

However, none of the prior art of record as in combination further disclosed of such wherein *the second portion is differentially coded with respect to the first portion.*

Similarly independent claims 14; 17 which cite the same claim feature as in claim 14 have been analyze and allowed.

In regard to independent claims 8, while, the prior art of record disclose of a method of encoding a multi-channel audio signal comprising at least two audio channels, the method comprising the steps of: generating a single channel audio signal from the at least two audio channels and encoding, using an encoder, the single channel audio signal into a bit stream as an encoded single channel audio signal; generating information from the at least two audio channels allowing to recover with a required quality level the multi-channel audio signal from the single channel audio signal and the in format ion and combining the information

and the single channel audio signal; wherein the generating information step comprises the steps of: determining a first portion of the information for a first frequency region of the multi-channel audio signal using a parameter determining circuit and encoding, using a parameter coder; the first portion of the information into bit stream as an encoded first portion of the information ;determining a second portion of the information for a second frequency region of the multi-channel audio signal, using the parameter determining circuit, the second frequency region being a portion of the first frequency region and encoding, using the parameter coder , the second portion of the information into the bit stream as an encoded second portion of the information.

However, none of the prior art of record as in combination further disclosed of such wherein characterized in that the first frequency region substantially covers a full bandwidth of the multi-channel audio signal, the second frequency region covers a portion of the full bandwidth, and in that the determining of the second portion of the information is adapted to determine sets of parameters for both the second frequency region and a set of further frequency regions, the second frequency region and the set of further frequency regions substantially covering the full bandwidth ; wherein the set of further frequency regions comprises at least one further frequency region.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by over Davis et al. (US 6,021,386).

Re claim 19, Davis et al. disclose of a method of recovering a multi-channel audio signal from an encoded single channel audio signal , said single channel audio signal having been encoded as claimed as in claim 1, the method of decoding comprising: obtaining a decoded single channel audio signal (fig.5; col.8 line 65-67) and obtaining decoded information from the information allowing to recover the multi-channel audio signal from the decoded single channel audio signal and the decoded information, the decoded information comprising the first portion of the information and the second portion of the information (fig.5 (1050); col.9 line 1-5) and applying either the first portion of the information or the first portion and the second portion of the information on the single channel audio signal to generate the recovered multi-channel audio signal (fig. 5); col.7 line 9-15; col.1-12; col.9 line 1-10/decoder to receive info and single with appropriate portion to generate multi-channel).

Re claim 20, Davis et al. disclose of a decoder for decoding an encoded single channel audio signal, said encoded single channel audio signal having been encoded as claimed in claim 1, the decoder comprising: means for obtaining a decoded single channel audio signal (fig.5; col.8 line 65-67) and means for obtaining decoded information from the information allowing to recover the multi-channel audio signal from the decoded single channel audio signal and the decoded information (fig.5 (1050); col.9 line 1-5) , the decoded information comprises the first portion of the information and the second portion of the information and means for applying the first portion of the information and the

second portion of the information on the single channel audio signal to generate the decoded multi-channel audio signal (fig.2 (212); col.7 line 9-15; fig.5; col.1-12; col.9 line 1-10/decoder to receive info and single with appropriate portion and generate multi-channels).

Re claim 21, an apparatus for supplying a decoded audio signal, the apparatus comprising: an input for receiving an encoded audio signal (fig.4/the encoder with input) and a decoder as claimed in claim 20 for decoding the encoded audio signal to obtain a multi-channel output signal and an output for supplying or reproducing the multi-channel output signal (fig.2 (212) ;fig.5; col.9 line 1-10; col.7 line 9-15; fig.5; col.1-12/decoder to receive info and single with appropriate portion and generate the mullti-channels).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DISLER PAUL whose telephone number is (571)270-1187. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian CHin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. P./
Examiner, Art Unit 2614

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2614